

REMARKS

By the present Amendment, minor revisions have been made in the specification and claim 1 has been revised to make an editorial amendment and to define an additional aspect of the invention consistent with the description provided in the specification starting with the last paragraph on page 32. In this respect, it will be noted that the presence of the defined hydrophilic overcoat layer capable of being removed on a printing machine is illustrated in Example 6 on page 41 with the advantageous results obtained thereby being set forth in the first paragraph on page 42. Additional illustrative examples using the defined overcoat are set forth in Examples 7-11 on pages 42 and 43 and in Examples 15, 17, 18 and 19-22 starting on page 44.

The sole rejection set forth in the Official Action is based on Vermeersch et al., U.S. Patent No. 6,210,857. Vermeersch et al. describes a heat sensitive imaging element for providing a lithographic printing plate which comprises a lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a hydrophilic polymer that is cross-linked. As set forth in the passage beginning at column 5, line 4, the cross-linked hydrophilic layer can also preferably contain substances that increase the mechanical strength and porosity of the layer such as colloidal silica. Vermeersch et al. further discloses at column 5, lines 29-35 that between the top layer and the hydrophobic oleophilic surface of the support there can be at least one additional layer which comprises at least one compound selected from the group of hydrophilic binders, silica and polymer latices.

As should be apparent to those of ordinary skill in the art, Vermeersch et al. does not anticipate or render obvious the invention defined in the claims of record. The patent does not teach the defined hydrophilic overcoat layer that is capable of being removed on a printing machine that is on top of the hydrophilic layer comprising the specified colloid, hydrophilic resin and the light-to-heat conversion material. In fact, by disclosing a "top layer" comprising the compound capable of converting light into heat and the cross-linked hydrophilic polymer, Vermeersch et al. would tend to suggest that a further layer is not in order. Thus, in light of the claims of record and the evidence provided in the specification, applicants respectfully maintain that the presently claimed invention is patentable over the cited prior art.

For all the reasons set forth above, applicants respectfully submit that the claims of record are patentable in all regards and therefore request reconsideration and allowance of the present application.

Should the Examiner wish to discuss any aspect of the present application, she is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

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Attachment to Amendment dated June 6, 2002

Marked-up Copy

Page 3, Paragraph Beginning at Line 18

An object of the present invention is to solve the above [object] problem. That is, an object of the present invention is to provide a heat-sensitive lithographic printing plate precursor that can be directly mounted on a printer (i.e., a printing press) without development processing and printing can be performed immediately, is excellent in press life and resistance to printing staining.

Page 10, Paragraph Beginning at Line 8

The particle size of pigments is preferably from 0.01 to 1 μm , more preferably from 0.01 to 0.5 μm . [Well-know] Well-known dispersing methods used in the manufacture of inks and toners can be used as dispersing methods of pigments. Examples of dispersing apparatus include an ultrasonic disperser, a sand mill, an attritor, a pearl mill, a super-mill, a ball mill, an impeller, a disperser, a KD mill, a colloid mill, a dynatron, a three-roll mill, a pressure kneader, etc., and details are described in Shaishin Ganryo Oyo Gijutsu (The Latest Pigment Applied Technique), CMC Publishing Co., Ltd. (1986).

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Marked-up Claim 1

1. (Amended) A heat-sensitive lithographic printing plate precursor comprising a substrate having an ink-receptive surface or coated with an ink-receptive layer having provided thereon a hydrophilic layer which comprises:
 - (1) a colloid of an oxide or a hydroxide of at least one element selected from the group consisting of beryllium, magnesium, aluminum, silicon, titanium, boron, germanium, tin, zirconium, iron, vanadium, antimony, and transition metals,
 - (2) a hydrophilic resin, and
 - (3) a light-to-heat conversion material and
a hydrophilic overcoat layer capable of being removed on a printing machine, in
this order.